

User Satisfaction in Public Sector Digital Transformation: A Critical EUCS Analysis of the E-Kinerja Application in Indragiri Hilir Regency

Tri Dermawan¹, Muhammad Jazman*², Tengku Khairil Ahsyar³, Eki Saputra⁴,
Fitriani Muttakin⁵, Arif Marsal⁶

^{1,2,3,4,5,6}Program Studi Sistem Informasi, Fakultas Sains dan Teknologi, Sistem Informasi, Universitas Islam Negeri Sultan Syarif Kasim Riau, Pekanbaru, Indonesia

Email: ¹112150311139@students.uin-suska.ac.id, ²jazman@uin-suska.ac.id, ³tengkukhairil@uin-suska.ac.id, ⁴eki.saputra@uin-suska.ac.id, ⁵fitrianimuttakin@uin-suska.ac.id, ⁶arif.marsal@uin-suska.ac.id

Abstract

The accelerated global push for digitalized public services places immense pressure on government agencies to ensure the effectiveness and user acceptance of new information systems. This study critically investigates user satisfaction with the E-Kinerja application, a pivotal e-performance management system implemented at the Regional Personnel and Human Resource Development Agency (BKPSDM) of Indragiri Hilir Regency. Utilizing the well-established End-User Computing Satisfaction (EUCS) model, encompassing content, accuracy, format, ease of use, and timeliness dimensions, this research employs a quantitative approach. Data were collected via questionnaires from 36 active users (total population) and analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) in SmartPLS. The findings reveal a nuanced and unexpected pattern of influence: only the Content (T-Statistic = 2.002, $p < 0.05$) and Timeliness (T-Statistic = 2.433, $p < 0.05$) dimensions significantly and positively impact user satisfaction. Crucially, Accuracy, Format, and Ease of Use did not exhibit a statistically significant influence. The model explained a substantial 76.7% of user satisfaction variance. This counter-intuitive outcome challenges generalized EUCS applicability in mandatory government contexts, suggesting that user priorities in public sector performance systems may uniquely emphasize core utility and promptness over aesthetic or perceived ease. These findings offer critical insights for public administrators prioritizing IT investments and contribute to refining the theoretical understanding of EUCS dynamics in specific organizational environments. Recommendations include prioritizing content quality and timely information delivery, while re-evaluating the perceived importance of other dimensions in similar government settings.

Keywords: E-Kinerja, EUCS, Government Information Systems, Mandatory System Use, PLS-SEM, Public Sector Digital Transformation, User Satisfaction.

1. INTRODUCTION

The rapid and pervasive digitalization of public services presents both unprecedented opportunities and critical challenges for governments worldwide. Agencies are under immense pressure to leverage Information and Communication Technologies (ICTs) to enhance efficiency, transparency, and accountability, ultimately improving public value [1]. In Indonesia, this imperative is underscored by mandates such as the Regulation of the Minister of Administrative and Bureaucratic Reform of the Republic of Indonesia Number 53 of 2014, driving the adoption of electronic performance management systems like the E-Kinerja application. The successful implementation of such systems is not merely a technical exercise but hinges critically on end-user acceptance and satisfaction, which directly correlates with system effectiveness and organizational performance [2].

The End-User Computing Satisfaction (EUCS) model, encompassing dimensions of content, accuracy, format, ease of use, and timeliness [3], has long served as a foundational framework for assessing user satisfaction with information systems. Its robustness is evident in its widespread application across diverse domains, from mobile applications and online learning platforms to healthcare systems and e-commerce [4], [5], [6]. Recent scholarly work continues to apply and, at times, adapt the EUCS model to understand user experiences in evolving technological landscapes [7], [8], [9]. For instance, studies examining mobile applications [6] and streaming services [5] have consistently identified content and ease of use as significant drivers of satisfaction.

However, the application of general satisfaction models within the unique context of mandatory government information systems presents a critical knowledge gap. Unlike voluntary adoption in commercial settings, government employees often have limited discretion in using mandated systems like E-Kinerja, which is crucial for performance assessment and remuneration [10]. While the EUCS model has been successfully applied to other government service applications [11], [12], the specific dynamics of user satisfaction in internal performance

management systems—where content and timeliness of feedback are arguably paramount remain underexplored. Existing literature also suggests the need for modified or integrated EUCS models to capture context-specific factors in dynamic digital environments [11].

This research, therefore, moves beyond a conventional EUCS application to critically investigate user satisfaction with the E-Kinerja application at the Regional Personnel and Human Resource Development Agency (BKPSDM) of Indragilir Hilir Regency. Our primary objective is to identify which EUCS dimensions are truly salient in this specific public sector setting, particularly in contrast to findings from other domains. By examining the E-Kinerja system, this study seeks to answer: Which dimensions of the EUCS model are the primary drivers of user satisfaction within a mandated government e-performance management system? The findings are poised to offer novel theoretical insights into the nuanced applicability of the EUCS model within public sector IT, challenging generalized assumptions about user priorities. Practically, this research provides urgent, evidence-based recommendations for government agencies and policymakers to optimize performance management systems, ensuring digital transformation initiatives genuinely enhance bureaucratic efficiency and employee satisfaction.

2. METHOD

The research methodology is depicted in Figure 1.

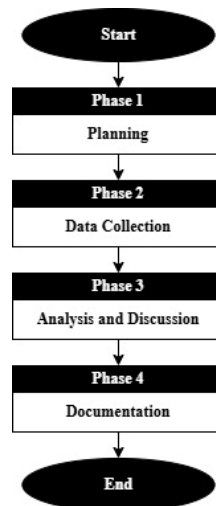


Figure 1. Flowchart of the Research Methodology

2.1. Planning Phase

This stage commenced with problem formulation through interviews with E-Kinerja application end-users to understand current field realities and user-faced issues. Subsequently, the research method was determined. Given the focus on measuring user satisfaction with an information system, the End-User Computing Satisfaction (EUCS) model was chosen. This model, developed by Doll and Torkzadeh [3], is widely recognized for its relevance in assessing user satisfaction by comparing expectations with perceived reality [13] and remains a foundational tool in contemporary research [6], [14]. The variables selected for this study correspond to the five dimensions of the EUCS model: content, accuracy, format, ease of use, and timeliness [15].

2.2. Data Collection Phase

Activities in this phase included a literature study to gather theories from journals, articles, and prior research. Interviews, structured around the five EUCS dimensions, were conducted with system administrators and active employee users to identify problems and obstacles. Direct observations of the system in operation were also performed. For sample determination, as the total population was less than 100, a total sampling technique was employed. Thus, the sample comprised all 36 active E-Kinerja user employees.

2.3. Analysis and Discussion Phase

Data obtained from distributed questionnaires were processed using Microsoft Excel and the SmartPLS 4.0 application, employing the PLS-SEM analysis method [16]. Hypothesis testing was conducted to ascertain data validity and determine the impact of each EUCS dimension. Data analysis included measurement model analysis (convergent and discriminant validity) and structural model analysis (path coefficient (β) testing, R^2 evaluation, and t-test value examination). The derived results were then described and discussed.

2.4. Documentation

The processes and results from the preceding steps were compiled into a research report, intended to serve as a valuable reference for the successful implementation and ongoing improvement of E-Kinerja at the Regional Personnel and Human Resources Development Agency of Indragiri Hilir Regency.

3. RESULTS AND DISCUSSION

3.1. E-Kinerja

E-Kinerja is a digital application service system designed to expedite employees' performance recording processes and assist in reporting and evaluation [17]. It facilitates job and workload analysis, forming a basis for calculating work efficiency. E-Kinerja allows employees to manage tasks and responsibilities proactively. Access is via employee-specific usernames and passwords. Figure 2 illustrates the E-Kinerja application's login page and its context within ASN performance management.



Figure 2. E-Kinerja Application Interface and ASN Performance Management Cycle

3.2. Data Analysis

Data analysis utilized SmartPLS 4 tools, involving the analysis of the Measurement Model (Outer Model) and Structural Model (Inner Model) based on a pre-designed path diagram (Figure 3).

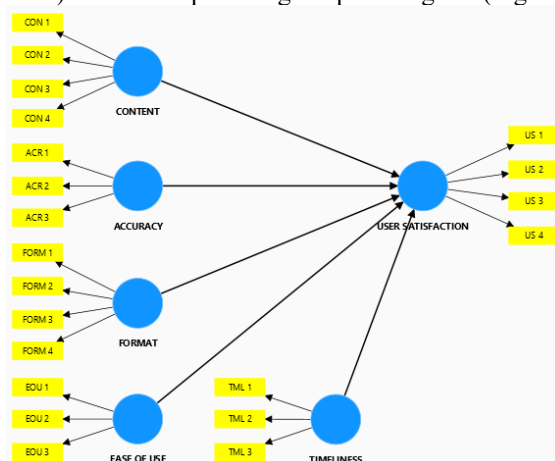


Figure 3. Path Diagram of the EUCS Model for User Satisfaction

Table 1. Path Diagram Item Description

Dimension	Item	Description
Accuracy	ACC1	Accuracy 1
Accuracy	ACC2	Accuracy 2
Accuracy	ACC3	Accuracy 3
Content	CON1	Content 1
Content	CON2	Content 2
Content	CON3	Content 3
Content	CON4	Content 4
Ease of Use	EOU1	Ease of Use 1
Ease of Use	EOU2	Ease of Use 2
Ease of Use	EOU3	Ease of Use 3
Display	FOR1	Display 1
Display	FOR2	Display 2
Display	FOR3	Display 3
Display	FOR4	Display 4
Timeliness	TIM1	Timeliness 1
Timeliness	TIM2	Timeliness 2
Timeliness	TIM3	Timeliness 3
User Satisfaction	EUS1	User Satisfaction 1
User Satisfaction	EUS2	User Satisfaction 2
User Satisfaction	EUS3	User Satisfaction 3
User Satisfaction	EUS4	User Satisfaction 4

3.3. Evaluation of Measurement Model (Outer Model)

The measurement model was assessed for validity (Convergent and Discriminant) and reliability.

a. Convergent Validity

Assessed via standardized loading factor values. Values ≥ 0.7 are ideal; values > 0.5 are acceptable [18]. Figure 4 displays the outer loading values. (All indicators met the threshold, except FORM 4 (0.520) which is acceptable but weaker).

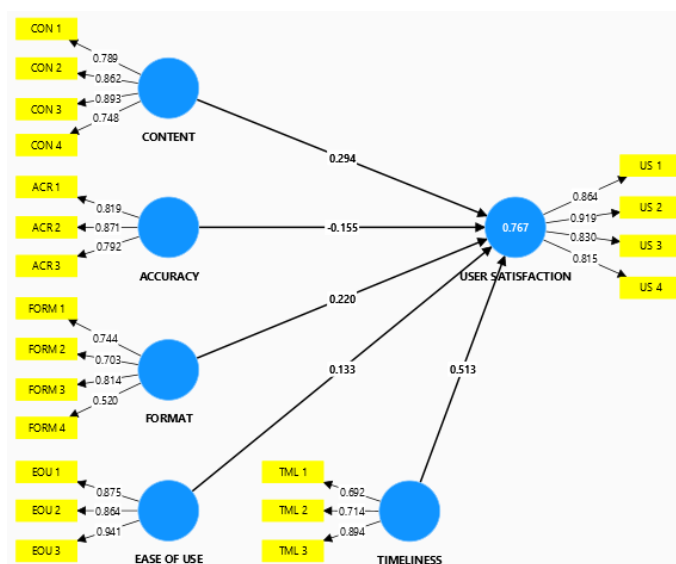


Figure 4. Outer Loading Values for the EUCS Model

b. Discriminant Validity

Assessed using cross-loading values and the Fornell-Larcker criterion. An indicator's loading on its own construct should be greater than its loading on other constructs [19]. Table 2 shows that all variables are valid.

Table 2. Discriminant Validity Scores (Cross-Loadings)

	ACR	CON	EOU	FORM	TML	US
ACR 1	0.819	0.609	0.280	0.357	0.367	0.316
ACR 2	0.871	0.560	0.162	0.462	0.304	0.345
ACR 3	0.792	0.452	0.165	0.402	0.199	0.222
CON 1	0.369	0.789	0.142	0.406	0.343	0.414
CON 2	0.398	0.862	0.332	0.485	0.331	0.566
CON 3	0.650	0.893	0.381	0.531	0.490	0.537
CON 4	0.803	0.748	0.109	0.370	0.380	0.415
EOU 1	0.171	0.139	0.875	0.621	0.593	0.539
EOU 2	0.115	0.234	0.864	0.553	0.575	0.517
EOU 3	0.328	0.405	0.941	0.603	0.736	0.77
FORM 1	0.441	0.567	0.245	0.744	0.230	0.482
FORM 2	0.145	0.307	0.414	0.703	0.276	0.442
FORM 3	0.490	0.410	0.758	0.814	0.585	0.597
FORM 4	0.249	0.190	0.386	0.520	0.295	0.376
TML 1	0.291	0.289	0.565	0.492	0.692	0.565
TML 2	0.181	0.153	0.396	0.271	0.714	0.423
TML 3	0.334	0.540	0.659	0.405	0.894	0.532
US 1	0.205	0.535	0.719	0.541	0.667	0.864
US 2	0.321	0.416	0.631	0.600	0.733	0.839
US 3	0.238	0.483	0.708	0.667	0.739	0.873
US 4	0.307	0.619	0.298	0.414	0.603	0.815

c. Internal Consistency Reliability

Assessed via composite reliability values. Values ≥ 0.7 are valid > 0.8 is very satisfactory [20]. Table 3 shows satisfactory reliability for all constructs.

Table 3. Composite Reliability Values

Variabel	Composite Reliability
Accuracy	0.799
Content	0.863
Ease Of Use	0.930
Format	0.712
Timeliness	0.730
User Satisfaction	0.884

d. Average Variance Extracted (AVE)

AVE values > 0.5 indicate validity [21]. Table 4 shows AVE values.

Table 4. Average Variance Extracted (AVE) Values

Variabel	Average Variance Extracted (AVE)
Accuracy	0.686
Content	0.680
Ease Of Use	0.799
Format	0.495
Timeliness	0.596
User Satisfaction	0.737

The Format variable (AVE = 0.495) is slightly below the 0.5 threshold, suggesting its indicators explain slightly less than half the variance in the construct. However, given its acceptable composite reliability (0.712) and the overall model fit, it was retained. Other variables demonstrate good convergent validity.

e. Cronbach Alpha

The Cronbach alpha value for the format and timeliness variables is still below 0.7, but still has a Composite Reliability value above 0.7 so it is said to be reliable and meets the requirements and is valid for use in this research model. Table 5 shows Cronbach alpha values.

Table 5. Cronbach Alpha Values

Variabel	Cronbach's Alpha	Composite Reliability	Description
Accuracy	0.774	0.799	Valid
Content	0.842	0.863	Valid
Ease Of Use	0.876	0.930	Valid
Format	0.662	0.712	Valid
Timeliness	0.661	0.730	Valid
User Satisfaction	0.880	0.884	Valid

3.4. Structural Model Evaluation (Inner Model)

Evaluated via R-Square and Path Coefficients (with T-Test significance).

a. Path Coefficient

Indicates the direction and strength of relationships. Table 6 presents these values.

Table 6. Path Coefficient Values

Variabel	Path Coefficient
Accuracy - User Satisfaction	-0.155
Content - User Satisfaction	0.294
Ease Of Use - User Satisfaction	0.133
Format - User Satisfaction	0.220
Timeliness - User Satisfaction	0.513

b. Coefficient of Determination (R-Square)

Measures the proportion of variance in the endogenous variable explained by exogenous variables. Values ≥ 0.75 are strong, 0.50 moderate, 0.25 weak. Table 7 shows the R-Square for User Satisfaction.

Table 7. Coefficient of Determination (R-Square) for User Satisfaction

Variabel	R-Square
User Satisfaction	0,767

c. Hypothesis Testing (T-Test)

Conducted using bootstrapping (one-tailed test, significance level 5%). T-statistic $>$ critical t-value (for $\alpha = .05$) indicates hypothesis acceptance. Table 8 shows the results.

Table 8. T-Test Results for Hypotheses

Variabel	Original Sample	T-Statistic	P-Value	Description
Accuracy - User Satisfaction	-0.155	1.192	0.233	Rejected
Content - User Satisfaction	0.294	2.002	0.045	Accepted
Ease Of Use - User Satisfaction	0.133	0.633	0.527	Rejected
Format - User Satisfaction	0.220	1.269	0.205	Rejected
Timeliness - User Satisfaction	0.513	2.433	0.015	Accepted

3.5. Influence of Content on User Satisfaction

The hypothesis that content positively influences User Satisfaction was accepted (t-statistic = 2.002, p-value = 0.045). This indicates that the quality, completeness, and clarity of information within the E-Kinerja application significantly determine employee satisfaction. This finding aligns with numerous EUCS studies across various domains. For instance, Prastio et al. [6] found content to be a significant influencer of user satisfaction with a mobile application, and Kusnadi [5] highlighted content variety as critical for Netflix user satisfaction. Similarly, Nawangsari et al. [22] and Trianisfi et al. [8] underscored the impact of content quality and accuracy in specific applications and OPAC systems, respectively. Good content helps users understand their tasks and performance, fostering a positive perception of the E-Kinerja application.

3.6. Influence of Accuracy on User Satisfaction

The hypothesis that accuracy positively influences User Satisfaction was rejected (t-statistic = 1.192, p-value = 0.233). This suggests that, for the users in this specific context, perceived accuracy of the E-Kinerja system did

not significantly contribute to their overall satisfaction. This is an interesting deviation from some studies, such as Nawangsari et al. [22] and Darmawan & Nugroho [12], where accuracy was impactful. It might imply that users either perceive the accuracy to be at an acceptable baseline or that other factors overshadow its impact on satisfaction.

3.7. Influence of Form (Format) on User Satisfaction

The hypothesis that format positively influences User Satisfaction was rejected (t-statistic = 1.269, p-value = 0.205). The presentation and layout of information in the E-Kinerja application did not significantly affect user satisfaction. While format is a traditional EUCS dimension, its impact can vary. The slightly lower AVE for this construct might also play a role.

3.8. Influence of Ease of Use on User Satisfaction

The hypothesis that ease of use positively influences User Satisfaction was rejected (t-statistic = 0.633, p-value = 0.527). This indicates that while the E-Kinerja application might be relatively easy to use, this factor alone was not statistically significant in enhancing user satisfaction in this cohort. This contrasts with findings from Prastio et al. [6], Kusnadi [5], and Trianisfi et al. [8], where ease of use was a critical factor. This divergence could be due to the specific nature of the E-Kinerja application, the mandatory nature of its use in a government setting, or user expectations being met to a basic level that does not translate into higher satisfaction.

3.9. Influence of Timeliness on User Satisfaction

The hypothesis that timeliness positively influences user satisfaction was accepted (t-statistic = 2.433, p-value = 0.015). The promptness in information presentation and performance reporting significantly increased user satisfaction with the E-Kinerja application. This aligns with Darmawan & Nugroho [12], who found timeliness crucial for user satisfaction with a government service application. In performance management systems, timely feedback and data are often paramount.

3.10. Discussion of Overall Findings and Broader EUCS Context

The robust R-square value of 0.767 confirms that the EUCS model provides substantial explanatory power (76.7%) for user satisfaction with the E-Kinerja application. The compelling significance of Content and Timeliness as primary drivers underscores a critical finding: for users within this specific government performance management system, the utility and immediacy of information are paramount. This aligns with the operational demands of performance tracking, where accurate reporting and timely feedback are essential for employees to manage their tasks and for the agency to make informed decisions.

However, the non-significance of Accuracy, Format, and Ease of Use presents a striking and novel insight that warrants deeper discussion. While these dimensions are typically considered foundational for user satisfaction across many information systems, their lack of significant influence in this context suggests several critical implications. First, it may indicate that users perceive the system's baseline in these areas as acceptable, preventing them from significantly impacting overall satisfaction; they are not "satisfiers" beyond a minimal threshold. Second, and more importantly, in a mandatory governmental context, users may prioritize core functional deliverables (accurate content, timely updates) over interface aesthetics or minor usability frustrations. Their use is driven by obligation and the need for performance recording, not necessarily by an enhanced ease of interaction. This contrasts sharply with findings from consumer-facing applications [5], [6] where ease of use is a critical differentiator. This divergence implies that the factors driving satisfaction in mandatory public sector IT may differ fundamentally from those in voluntary commercial contexts.

This study's findings directly contribute to the ongoing scholarly debate on the adaptability and contextual sensitivity of the EUCS model. While prior research has explored modified EUCS models for specialized applications [11] or integrated it with other frameworks like DeLone & McLean [9], our results emphasize that even within its original five dimensions, the relative importance can shift dramatically based on the organizational and operational environment. Specifically, we provide evidence that the utility-focused dimensions (Content, Timeliness) dominate in a high-stakes, mandatory public sector performance system, overshadowing the influence of experience-focused dimensions (Accuracy, Format, Ease of Use) that are often prominent in other domains. This suggests that a one-size-fits-all approach to information system design and evaluation in government may be insufficient.

The widespread application of EUCS across diverse domains—including healthcare [4], education [7], and commercial platforms [23], [24] demonstrates its versatility. Yet, our results highlight a critical need for context-

aware application and interpretation of this model, particularly in the public sector. Understanding these specific user priorities is urgent for governments investing heavily in digital transformation, as it allows for targeted improvements that genuinely enhance user satisfaction and system efficacy, rather than diffusing resources across less impactful areas. This research, therefore, serves as a vital case for re-evaluating IT investment strategies in public administration based on empirical user-centric data from mandatory systems.

4. CONCLUSION

This study rigorously applied the End-User Computing Satisfaction (EUCS) model to provide a critical assessment of user satisfaction with the E-Kinerja application at the BKPSDM of Indragiri Hilir Regency, a context vital for ongoing digital transformation in public administration. Our findings compellingly demonstrate that Content and Timeliness are the paramount drivers of user satisfaction in this government e-performance management system. This underscores a key insight: for users operating under mandated system use, the direct utility, relevance, and immediacy of information are prioritized above other design elements.

A significant and novel contribution of this research lies in the non-significant influence of Accuracy, Format, and Ease of Use on user satisfaction within this context. This finding diverges from many general EUCS applications and suggests that in mandatory government information systems, a baseline expectation of these qualities may exist, where meeting minimum requirements does not translate into enhanced satisfaction. Instead, satisfaction is primarily driven by the system's core ability to provide comprehensive, relevant, and timely data crucial for performance management. This insight is urgent for public sector organizations as it highlights where to strategically allocate resources for system optimization: focusing on content quality and information timeliness will yield the most substantial improvements in user satisfaction and, by extension, system effectiveness.

From a broader research perspective, this study significantly advances the theoretical understanding of the EUCS model's contextual boundaries. It provides empirical evidence that the hierarchy of influence among EUCS dimensions is not universal but can be uniquely shaped by the organizational setting and the mandatory nature of system use. This calls for more nuanced applications of satisfaction models in specialized environments.

For practitioners and policymakers, these findings offer actionable guidance for enhancing government information systems. Instead of uniform improvements, efforts should be intensely focused on content accuracy, completeness, and clarity, alongside ensuring the real-time availability and prompt processing of performance data. Future research on government information systems could productively explore integrated models, potentially incorporating factors such as perceived organizational support or system trust, to further refine our understanding of user behavior in mandatory contexts. A continuous, context-aware, and user-centric approach to system evaluation, informed by empirical insights, is essential for securing the success of public sector digital transformation initiatives in an increasingly interconnected and demanding environment.

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